UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

NOVAK DRUCE + QUIGG LLP 300 NEW JERSEY AVENUE, NW FIFTH FLOOR WASHINGTON, DC 20001 EXAMINER

NGUYEN, NGA B

ART UNIT PAPER NUMBER

3684

DATE MAILED: 04/02/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,929	09/06/2000	Garland Stephens	8224.003.NPUS00	8518

TITLE OF INVENTION: METHOD AND SYSTEM FOR DETERMINING, CONTRACTING TO EXCHANGE, AND ACCOUNTING FOR MATCHED

SETS OF OFFSETTING CASH FLOWS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$870	\$0	\$0	\$870	07/02/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

idicated unless correcte naintenance fee notifica	ed below or directed oth tions.	nerwise in Block 1, by (a	a) specifying a new corr	espondence address;	and/or	r (b) indicating a sepa	correspondence address as
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 28694 7590 04/02/2012				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mushave its own certificate of mailing or transmission.			
NOVAK DRU	CE + QUIGG LLI EY AVENUE, NW	I i St ad tra	nereby certify that th ates Postal Service w dressed to the Mail	is Fee(s th suf	e of Mailing or Transı s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the da	deposited with the United t class mail in an envelope above, or being facsimile	
							(Depositor's name)
			L				(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
09/655,929	09/06/2000		Garland Stephens		82	24.003.NPUS00	8518
ETS OF OFFSETTING		TEM FOR DETERMINI				COUNTING FOR MA	ATCHED
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	E PREV. PAID ISSUI	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$870	\$0	\$0		\$870	07/02/2012
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	7			
NGUYEN	N, NGA B	3684	705-035000	_			
FR 1.363). Change of corresp Address form PTO/SE The Address ind PTO/SB/47; Rev 03-0 Number is required. ASSIGNEE NAME AT PLEASE NOTE: Unl	ND RESIDENCE DATA less an assignee is identi h in 37 CFR 3.11. Comp	nge of Correspondence "Indication formed. Use of a Customer A TO BE PRINTED ON	data will appear on the	to 3 registered patentively, gle firm (having as a agent) and the nam- torneys or agents. If e printed. ype) patent. If an assign- n assignment.	membes of upno nam	p to le is 3dentified below, the do	ocument has been filed for
ease check the appropriate. The following fee(s) and Issue Fee			inted on the patent): D. Payment of Fee(s): (Pl	ease first reapply ar			shown above)
Publication Fee (No small entity discount permitted)			☐ Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
	tus (from status indicated		- · · · · · · · · · · · · · · · · · · ·			(
	s SMALL ENTITY statu		b. Applicant is no lo				
OTE: The Issue Fee and terest as shown by the I	d Publication Fee (if requecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than Office.	the applicant; a regi	stered a	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No			
nis collection of inform n application. Confident abmitting the completed	nation is required by 37 C tiality is governed by 35 d application form to the	CFR 1.311. The information U.S.C. 122 and 37 CFR U.S.P.TO. Time will vary	on is required to obtain on 1.14. This collection is endepending upon the independent of the control of the con	retain a benefit by the stimated to take 12 re ividual case. Any co	he publ ninutes mment	lic which is to file (and s to complete, including is on the amount of tin	by the USPTO to process) g gathering, preparing, and neutron to Complete

submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 04/02/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,929	09/06/2000	Garland Stephens	8224.003.NPUS00	8518
28694 75	90 04/02/2012		EXAM	INER
NOVAK DRUCI		NGUYEN, NGA B		
300 NEW JERSEY FIFTH FLOOR	AVENUE, NW	ART UNIT PAPER NUMBER		
WASHINGTON, I	OC 20001	3684		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)				
Notice of Allowability	09/655,929 Examiner	STEPHENS ET AL. Art Unit				
	Lamine	Artonit				
	NGA B. NGUYEN	3684				
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communicatio GHTS. This application is subject	oplication. If not included n will be mailed in due course. THIS				
1. \boxtimes This communication is responsive to <u>the RCE filed on Febru</u>	<u>ıary 1, 2012</u> .					
 An election was made by the applicant in response to a rest the restriction requirement and election have been incorporate 		the interview on;				
3. ☑ The allowed claim(s) is/are <u>12 and 28-30</u> .						
 4. ☐ Acknowledgment is made of a claim for foreign priority under a) ☐ All b) ☐ Some* c) ☐ None of the: 	er 35 U.S.C. § 119(a)-(d) or (f).					
1. Certified copies of the priority documents have						
2. Certified copies of the priority documents have	• • • • • • • • • • • • • • • • • • • •					
3. Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the				
International Bureau (PCT Rule 17.2(a)).						
* Certified copies not received:						
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements				
 A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 						
6. CORRECTED DRAWINGS (as "replacement sheets") must	t be submitted.					
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO	-948) attached				
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the 0	Office action of				
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t						
 DEPOSIT OF and/or INFORMATION about the deposit of B attached Examiner's comment regarding REQUIREMENT FC 						
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal I	Patent Application				
 Notice of Preferences Gled (P10-892) DNotice of Draftperson's Patent Drawing Review (PTO-948) 	6. ☐ Interview Summary	• •				
	Paper No./Mail Da	ate				
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 	7. Examiner's Amend	ment/Comment				
4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☒ Examiner's Statement of Reasons for A						
of Biological Material	9.					

Application/Control Number: 09/655,929 Page 2

Art Unit: 3684

DETAILED ACTION

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 1, 2012 has been entered.
- 2. Claims **12 and 28-30** are pending in this application.

Allowable Subject Matter/Reasons for Allowance

- 3. Claims **12 and 28-30** are allowed over the prior arts cited records.
 - The closest prior arts are:
- 1) Hausman (US 6,086,619) discloses an apparatus and method for modeling optimization problems providing variable specification of both input and output in enhanced graph theoretic form. Problem elements including nodes and links may be defined, as may constraints on nodes and links and on groups of nodes and links including proportional and required relationships between network elements and groups of network elements that are connected and unconnected. Data received in enhanced graph theoretic format are transformed into the form of an objective function, possibly including linear, bilinear, and quadratic terms, and a system of constraints, which are

Application/Control Number: 09/655,929

Art Unit: 3684

then solved using network program, linear program or mixed integer linear program software.

Page 3

- 2) May (US 6,317,727) discloses a credit monitoring system in an electronic trading system forms a complex check to determine if two particular counterparties will except each other for a particular trade based upon their respective predefined credit preferences. In accordance with an embodiment, credit preferences imputed by each counterparty with regard to the other counterparty are referenced to determine the trade eligibility of either party with respect to the other for a particular financial transaction instrument. Indication of whether a counterparty can enter into the proposed trade is conveyed to the respective trader, preferably using a color coding scheme in which various colors represent the relevant credit status with regard to the viewing trader. The complex check performed by the system may be embodied in a simple yes/no statement, in terms of maturity of a particular financial instrument, or in terms of a risk quotient (i.e., risk equivalent or RQ) initially determined by the system, though modifiable by the trader.
- 3) Young (US 6,393,409) discloses computer technology for substantially optimizing portfolios of multiple participants is disclosed. Preferably the portfolios of such multiple participants comprise fixed income instruments. The disclosed systems and methods include using at least one computer system for storing digital data representing portfolio holdings of multiple parties and, in particular, for each participant storing in the computer memory data representing constraints with respect to the desired portfolio. The method and system comprise optimizing using an optimization

Application/Control Number: 09/655,929

Art Unit: 3684

engine portfolio and constraint information of multiple participants so as to generate a set of trades that would substantially optimize participants portfolios with respect to a known objective.

Page 4

Therefore, it is clear from the description of Hausman's, May's, and Young's inventions that the cited prior arts do not consider the possibility of: determining, via processor instruction, data corresponding to a linear combination of edges corresponding to a maximum notional amount for the graph with respect to one or more exchange definitions, as included in claim 12; determining, via processor instructions stored in the one or more memories and executed on the one or more processors, data corresponding to a linear combination of edges corresponding to a maximum notional amount for the graph with respect to one or more swap definitions, as included in claim 28; determine a linear combination of structured cash flow exchanges having a net present value of substantially zero and corresponding to maximum flow for a graph having at least one node corresponding to at least one swap such that the set of structured cash flow exchanges determined thereby is substantially hedged, as included in claim 29; determine a linear combination of structured cash flow exchanges having a net present value of substantially zero and corresponding to minimum cut for a graph having at least one node corresponding to at least one swap such that the set of structured cash flow exchanges determined thereby is substantially hedged, as included in claim 30.

Application/Control Number: 09/655,929 Page 5

Art Unit: 3684

Conclusion

4. Claims **12 and 28-30** are allowed.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (571) 272-6796. The examiner can normally be reached on Monday-Friday from 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Dunham can be reached on (571) 272-8109.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3600.

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria VA, 22131-1450

Or faxed to:

(571) 273-8300 (for formal communication intended for entry),

or

(571) 273-6796 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Application/Control Number: 09/655,929

Page 6

Art Unit: 3684

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nga B. Nguyen/

Primary Examiner, Art Unit 3684

March 22, 2012